

REMARKS

The Office Action dated February 3, 2009 has been read and carefully considered and the present amendment submitted to better define the present invention.

In that Office Action, claims 1, 4-6, 10, 12 and 22-27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Staebler, U.S. Patent 4,742,910 in view of Steiner et al, U. S. Patent 4,955,865. Claims 7, 8 and 11 were rejected under 35 U.S.C. 103(a) as begin unpatentable over Staebler in view of Steiner et al.

First, Applicant has amended the claims to be more consistent with the use of the term “cap” as referring to the removable protective cap that covers the injection end of the needle and which is secured to the hub.

Applicant has also now amended claim 1 to add the recitation of the disengagement means that is in the cap holding device and which disengages “the at least a pair of opposing protrusions from engagement with the at least one recess of the hub by pulling the protrusions radially outwardly” to carry out the disengagement of the protrusions from the recess.

The added language points out a system there is present in the subject invention and which is not found in the disclosures of either Staebler or Steiner et al. In particular, the present invention includes, and now more clearly claims, an engagement system that actually engages the cap to the hub and that system provides protection against the cap inadvertently becoming removed from the hub resulting in exposure of the needle.

As such, with the present invention, the device can be handled, moved, and the needle end is maintained in a protective environment by the positive engagement of the cap with the hub, that is, the hub has at least one recess into which at least a pair of opposing protrusions are engaged to hold the cap firmly to the hub, thereby safely enclosing the injection end of the needle.

The present cap holding device, however, not only holds the cap to allow the user to withdraw the needle therefrom in the use of the syringe, but also includes an engagement system that positively holds the cap onto the hub. There is no system or device in either of the Staebler and Steiner et al citations that disengage a positive interconnection formed by a protrusion on the cap entering into a recess on the hub.

The Examiner has pointed to “upper and lower protrusions on the opening of cover 28 which contact annular recess space on hub 40” however, Applicant finds no such protrusions or grooves between the hub and the cap in Staebler. There are some rounded serrations in Fig. 4 but on close inspection, they do not appear to be between the hub and the cap or sheath of Staebler but are formed inwardly thereof, possibly in securing the needle within the hub. It appears that the Staebler sheath has no such indentations or grooves and the specification of Staebler itself describes the sheath as being only frictionally engaged to the hub. See column 3, lines 35-37 “The sheath 28 is frictionally retained on the cylindrical body 40 which supports the needle”.

To the contrary, both the Staebler and Steiner et al references are concerned with having some engagement between the holding device and the cap to remove the cap therefrom but in each instance, there is no system or even a suggestion of some system of holding the cap to the hub that must be physically disengaged to remove the cap and produce an operative syringe.

However, in any case, in order to expedite the present patent application, Applicant has further refined the language of claim 1 to include that the disengagement means in the cap holding device carries out that disengagement by “pulling the protrusions radially outwardly” and is a feature not disclosed or remotely suggested in Staebler of Steiner et al no matter where the protrusion of Fig 4 of Staebler are located.

In summary, therefore, according to the language of claim 1, the cap is securely held onto the hub by means of the hub including “at least one recess disposed annularly about the hub” and the cap clearly includes “at least a pair of opposing protrusions for engagement with the at least one recess of the hub”, thereby providing a protective system to retain the cap onto the end of the syringe in its protective position enclosing the injection end of the needle. That protective system is then disengaged by use of the cap holding device that disengages and releases the cap by disengaging the opposing protrusions from the recess by pulling the protrusions radially outwardly to allow the cap to be removed while, at the same time, there is a mechanical linkage system that selectively retains or releases the cap from the cap holding device.

Thus, the present invention is more than simply a system like Staebler or Steiner et al to remove a cap from a syringe; it also includes a system that detaches the cap from the needle hub by disengaging the protrusions for the annular recess in the hub by outward movement thereof.

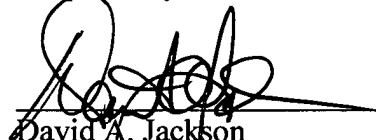
Turning to claim 22, the claim has been amended to make it clearer that that the disengagement means in the cap holding device specifically disengages the protrusions on the cap. In this claim, the protrusion are recited as having handles corresponding to the inwardly facing protrusions and the cap is disengaged from the hub by “pulling the

handles radially outwardly with respect to the hub". Again, there is no such system evidenced in either the Staebler or Steiner et al system.

Finally, claim 26 has also been amended to add that there is an actuator that is positioned remotely from the housing of the cap holding device to operate the disengagement means "by pulling the protrusion radially outwardly from the recess" in removing the cap and, again, there is no such disclosure in either of the cited references.

Accordingly, it is submitted that the newly amended claims are patentable over the cited references and an allowance of the present patent application is respectfully solicited.

Respectfully submitted,



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Enclosures: Request for Two (2) Month Extension of Time